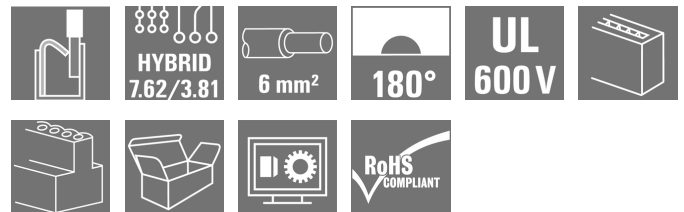


**OMNIMATE Power - series BV/SV 7.62HP  
BVF 7.62HP/02/180 BCF/04R SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

**Product image**


Similar to illustration

180° female plug with energy and signal contacts in  
PUSH IN wire connection in 7.62 pitch.  
Fulfils the IEC 61800-5-1 requirement and for the energy  
contact UL 1059 ClassC 600 V.

**General ordering data**

Type	BVF 7.62HP/02/180 BCF/04R SN BK BX
Order No.	<a href="#">1080550000</a>
Version	PCB plug-in connector, female plug, 7.62 mm, No. of poles: 2, 180°, PUSH IN, Clamping range, max.: 10 mm², Box
GTIN (EAN)	4032248842964
Qty.	65 pc(s).
Product data	IEC: 1000 V / 38 A / 0.5 - 10 mm² UL: 600 V / 35 A / AWG 24 - AWG 8
Packaging	Box

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**Technical data****Dimensions and weights**

Net weight	14.65 g
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**system parameters**

Product family		Type of connection	
Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Field connection
Wire connection method	PUSH IN	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Conductor outlet direction	180°
No. of poles	2	L1 in mm	7.62 mm
L1 in inches	0.3 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	6 mm <sup>2</sup>
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Volume resistance	4.50 mΩ	Can be coded	Yes
Stripping length	12 mm	Screwdriver blade	0.6 x 3.5
Plugging cycles	25	Plugging force/pole, max.	17 N
Pulling force/pole, max.	15 N		

**Material data**

Insulating material		Colour	
Insulating material	PA GF	Colour	black
Material of operational elements	PPA GF	Colour chart (similar)	RAL 9011
Insulating material group	II	CTI	≥ 500
Insulation strength	≥ 10 <sup>8</sup> Ω	UL 94 flammability rating	V-0
GWFI	960 °C	Contact material	Copper alloy
Contact surface	tinned	Layer structure of plug contact	6-8 μm Sn glossy
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-50 °C
Operating temperature, max.	125 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	125 °C		

**Conductors suitable for connection**

Clamping range, min.	0.5 mm <sup>2</sup>
Clamping range, max.	10 mm <sup>2</sup>
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	10 mm <sup>2</sup>
Stranded, max. H07V-R	10 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>
Flexible, max. H05(07) V-K	10 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm <sup>2</sup> max.	
w. wire end ferrule, DIN 46228 pt 1, min 1.5 mm <sup>2</sup>	
w. wire end ferrule, DIN 46228 pt 1, 10 mm <sup>2</sup> max.	

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**Technical data**

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm <sup>2</sup>
AEH	Stripping length	nominal	14 mm
Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm <sup>2</sup>
AEH	Stripping length	nominal	15 mm
Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm <sup>2</sup>
AEH	Stripping length	nominal	15 mm
	Stripping length	nominal	12 mm
Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm <sup>2</sup>
AEH	Stripping length	nominal	14 mm
	Stripping length	nominal	12 mm
Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm <sup>2</sup>
AEH	Stripping length	nominal	14 mm
	Stripping length	nominal	12 mm
Cross-section for conductor connection	Type	fine-wired	
		nominal	4 mm <sup>2</sup>
AEH	Stripping length	nominal	12 mm
	Stripping length	nominal	14 mm
Cross-section for conductor connection	Type	fine-wired	
		nominal	6 mm <sup>2</sup>
AEH	Stripping length	nominal	14 mm
	Stripping length	nominal	12 mm
Cross-section for conductor connection	Type	fine-wired	
		nominal	10 mm <sup>2</sup>
AEH	Stripping length	nominal	12 mm
Max. clamping range	10 mm <sup>2</sup>		

**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	38 A
Rated current, max. no. of poles (Tu=20°C)	38 A	Rated current, min. no. of poles (Tu=40°C)	34 A
Rated current, max. no. of poles (Tu=40°C)	34 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	1,000 V	Rated voltage for surge voltage class / pollution degree III/3	800 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	8 kV	Short-time withstand current resistance	3 x 1s with 420 A
Clearance, min.	10.4 mm	Creepage distance, min.	12.7 mm

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**Technical data**

**Rated data acc. to CSA**

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V
Rated current (Use group C / CSA)	33 A
Wire cross-section, AWG, min.	AWG 24
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / CSA)	600 V
Rated current (Use group B / CSA)	33 A
Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, max.	AWG 8

**Rated data acc. to UL 1059**

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V
Rated current (Use group C / UL 1059)	35 A
Wire cross-section, AWG, min.	AWG 24
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / UL 1059)	600 V
Rated current (Use group B / UL 1059)	35 A
Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, max.	AWG 8

**Packing**

Packaging	Box	VPE length	45 mm
VPE width	135 mm	VPE height	350 mm

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**Technical data**
**Technical data - hybrid**

stripping length (Signal)	8 mm	Pitch in mm (Signal)	3.81 mm
Pitch in inches (Signal)	0.15 inch	Number of poles (Signal)	4
L2 in mm	3.81 mm	L2 in inch	0.15 inch
Number of rows (Signal)	2	Contact material (Signal)	CuMg
Contact surface (Signal)	tinned	Rated voltage for overvoltage class/ pollution severity level II/2 (Signal)	400 V
Rated voltage for overvoltage class/ pollution severity level III/2 (Signal)	320 V	Rated voltage for overvoltage class/ pollution severity level III/3 (Signal)	200 V
Rated impulse voltage for overvoltage class/pollution severity level II/2 (Signal)	4 kV	Rated impulse voltage for overvoltage class/pollution severity level III/2 (Signal)	4 kV
Rated impulse voltage for overvoltage class/pollution severity level III/3 (Signal)	4 kV	Short-time withstand current resistance (Signal)	3 x 1s with 80 A
Rated voltage (Use group B / CSA) (Signal)	300 V	Rated voltage (Use group C / CSA) (Signal)	50 V
Rated voltage (Use group D / CSA) (Signal)	300 V	Rated current (Use group B / CSA) (Signal)	9 A
Rated current (Use group C / CSA) (Signal)	9 A	Rated current (Use group D / CSA) (Signal)	9 A
Wire connection cross-section AWG (Signal)	AWG 26...AWG 16	Rated voltage (Use group B / UL 1059) (Signal)	300 V
Rated voltage (Use group C / UL 1059) (Signal)	50 V	Rated voltage (Use group D / UL 1059) (Signal)	300 V
Rated current (Use group B / UL 1059) (Signal)	5 A	Rated current (Use group C / UL 1059) (Signal)	5 A
Rated current (Use group D / UL 1059) (Signal)	5 A	Connector cross-section (Signal)	AWG 26...AWG 16

**Conductors that can be connected - Hybrid**

Clamping range, rated connection (Power)	0.5...10 mm <sup>2</sup>	Clamping range, rated connection (Signal)	0.2...1.5 mm <sup>2</sup>
Connector cross-section (Power)	AWG 24...AWG 8	Connector cross-section AWG (Signal)	AWG 26...AWG 16
solid, H05(07) V-U (Power)	0.5...10 mm <sup>2</sup>	solid, H05(07) V-U (Signal)	0.14...1.5 mm <sup>2</sup>
flexible, H05(07) V-K (Power)	0.5...6 mm <sup>2</sup>	flexible, H05(07) V-K (Signal)	0.14...1.5 mm <sup>2</sup>
with wire-end ferrule with collar (Power)	0.5...6 mm <sup>2</sup>	with wire-end ferrule with collar, DIN 46 228/4 (Signal)	0.25...1.5 mm <sup>2</sup>
with wire-end ferrule according to DIN 46 228/1 (Power)	0.5...6 mm <sup>2</sup>	with wire-end ferrule according to DIN 46 228/1 (Signal)	0.25...1.5 mm <sup>2</sup>

**Classifications**

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002638	eClass 6.2	27-26-07-04
eClass 7.1	27-44-04-02	eClass 8.1	27-44-04-02
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09

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**Technical data****Notes**

Notes	<ul style="list-style-type: none"> <li>• Technical specifications refer to the power contacts</li> <li>• Technical data of signal contacts: 50V / 5A, stripping length 8mm</li> <li>• Additional colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.</li> </ul>
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IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
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**Approvals**

Approvals



ROHS	Conform
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**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL_INVERTER EN</a> <a href="#">FL_BASE_STATION EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>
Engineering Data	<a href="#">EPLAN_WSCAD</a>
Engineering Data	<a href="#">STEP</a>
Motion controllers white paper	<a href="#">Download Whitepaper</a>
User Documentation	<a href="#">Operating Instruction BVF</a> <a href="#">QR-Code product handling video</a>
White Paper UL 600 V	<a href="#">Download Whitepaper</a>
White Paper wire connection	<a href="#">Download Whitepaper</a>

**Data sheet**

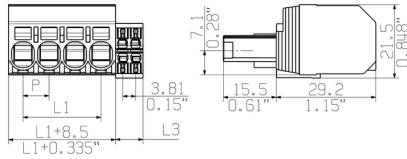
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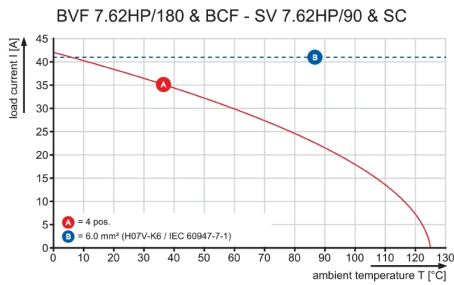
**Drawings**

**Dimensional drawing**

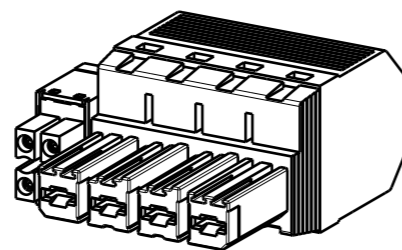
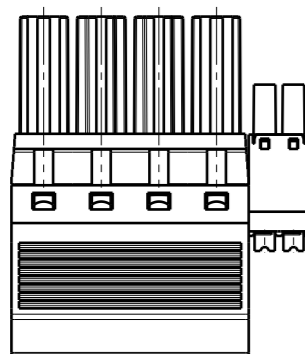
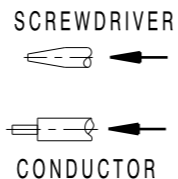
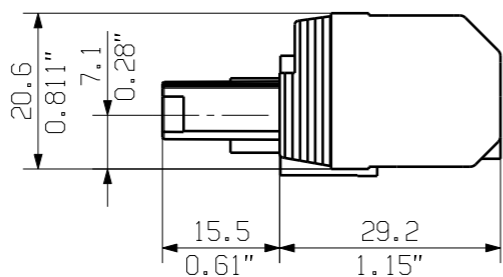
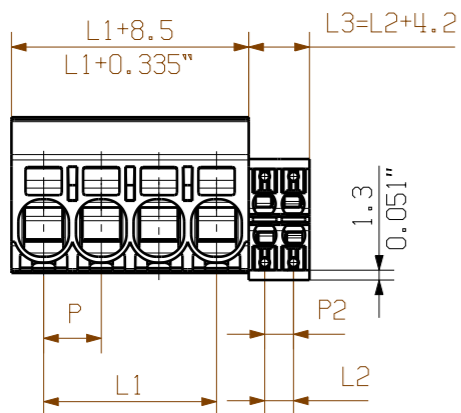
**Graph**



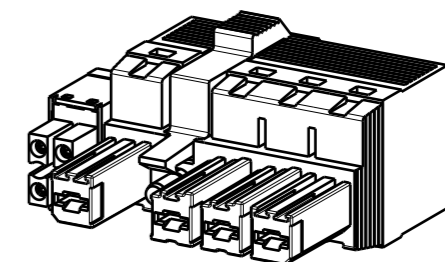
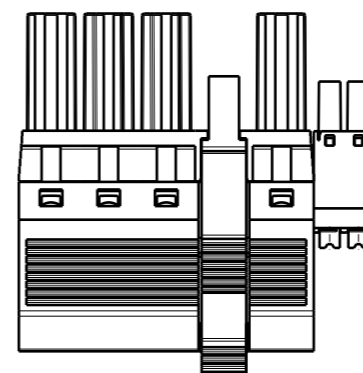
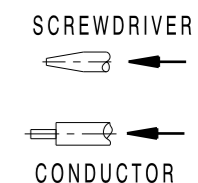
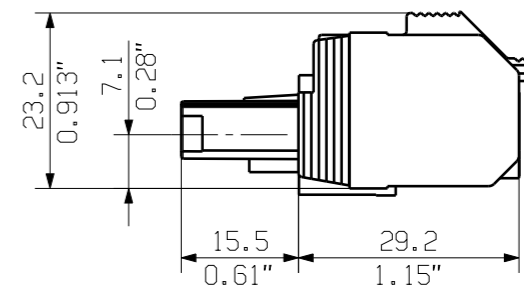
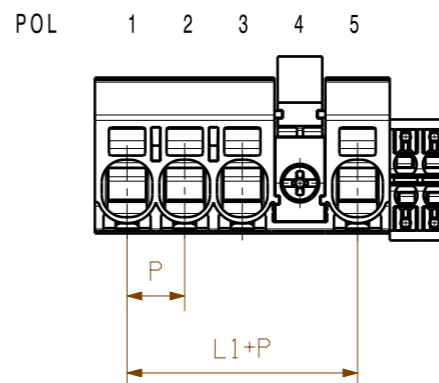
**Graph**



BVF7.62HP/.../180BCF/...R  
 SHOWN: BVF7.62HP/04/180BCF/04R



BVF7.62HP/.../180MF...BCF/...R  
 SHOWN: BVF7.62HP/04/180MF4BCF/04R



P = Raster/pitch = 7.62  
 P2 = Raster/pitch = 3.81

5	30,48	7.62	HYBRID 4POL L3=8.03mm L2=3.81	HYBRID 6POL L3=11.84mm L2=7.62	HYBRID 8POL L3=15.65mm L2=11.43
4	22,86				
3	15,24				
2	7,62				
POLZAHL/ NO OF POLES	L1 mm	P mm			

P=POL/POLES  
 MF= MITTELFLENSCH/MIDDLE FLANGE

5 MF 4	P	P	P	MF	P	P
5 MF 3	P	P	MF	P	P	P
4 MF 4	P	P	P	MF	P	
4 MF 3	P	P	MF	P	P	
3 MF 3	P	P	MF	P		
3 MF 2	P	MF	P	P		
2 MF 2	P	MF	P			
POLE	1	2	3	4	5	6
NO OF POLES	POS					

GENERAL TOLERANCE:  
 DIN ISO 2768-m

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

RoHS COMPLIANT	Max. nos.	Prim PLM Part No.:005815		Prim ERP Part No.:1080320000	
	First Issue Date 29.08.2018	00			
Modification		Drawing no. <b>49284</b> Issue no. <b>10</b> Sheet 01 of 01 sheets			
		Date	Name		BVF 7.62HP/04/180 BCF BUCHSENLEISTE SOCKET BLOCK
Scale: 2/11		Drawn	24.10.2018 Administrator		
Size: A3		Responsible	Krug, Matthias		
Drawings Assembly		Approved			Product file: 7390 BVF/SVF 7.62HP

not released